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Contract Number: DTPH56-08-T-000017

Prepared for: DOT, Sam Hall

Project Title: GPS-Based Excavation Encroachment Notification Project

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For quarterly period ending: March 31, 2009

### **TASK 1: Steering Committee**

GTI presented the project status to the R&D committee at the CGA conference in Feb 2009. Feedback regarding the trigger mechanism, potential pilot participants and accuracy requirements was received.

### **TASK 2: Develop a GPS-Based Excavation Monitor**

GTI completed the set-up of three commercially available GPS monitoring systems. The selected GPS monitoring system allows up to six switches to be activated to allow custom sensors to be developed and retrofitted on excavation equipment. Modifications to the web-services software for the GPS monitoring system from the commercial provider continued to be developed.

GTI conducted two meetings with excavation equipment manufacturers to present the project concept and to determine future levels of participation. Both companies expressed interest in supporting the project.

### **TASK 3: Develop GPS-Based Excavation Software**

Progress on this task has been limited this quarter because information has not received.

### **TASK 4: Pilot Program – Phase 1**

A third potential pilot participant was identified. Virginia SCC agreed to solicit potential pilot participants.

GTI has developed a letter soliciting participation in the pilot project for this summer that VUPS will circulate to all Phase 1 project participants. Utilizing excavators that are already using Phase 1 technology will make the pilot project more streamlined and effective.

The following activities are planned for the next quarter:

- Complete portal prototype
- Complete development of trigger mechanisms for GPS monitoring system
- Conduct follow-up meeting with equipment manufacturers
- Finalize pilot participants.